IN THE CLAIMS

1.   (Original) A computer system having a plurality of processors within a cell, the cell comprising:

a processor type register,

a management subprocessor,

an EEPROM, and

mapping hardware coupling the plurality of processors to the EEPROM;

wherein at system boot the management subprocessor reads the processor type

register to determine an appropriate boot image of a plurality of boot

images recorded within the EEPROM, and configures the mapping

hardware to map the appropriate boot image into boot address space of

processors of the cell.

2.   (Currently Amended) A method of providing firmware to a <u>first</u> processor of a cell of a cellular computer system comprising the steps:

reading information from a processor type register<u> into a management</u>

<u>subprocessor</u>;

determining a processor instruction set architecture from <u>the</u> information read

from the processor type register;

selecting a compatible boot image from a plurality of boot images, the

plurality of boot images contained within an EEPROM of the cell,

where each boot image has associated boot-image information; and

configuring mapping hardware to map the ~~appropriate~~ <u>compatible</u> boot image

of the EEPROM into boot address space of the <u>first</u> processor.

3.   (Currently Amended) The method of claim 2 wherein the ~~steps of~~ ~~reading a processor type register and~~ <u>step of</u> selecting a compatible boot image ~~are~~ <u>is</u> performed by a management ~~coprocessor~~ <u>subprocessor</u> of the cell.

4.   (Original) The method of claim 2 wherein the boot-image information comprises version information, and where the step of selecting a compatible boot image selects a most recent version unless a version flag is set.

5.   (Original) The method of claim 2 wherein the boot-image information comprises version information, and where the step of selecting a compatible boot image selects a most recent version unless a condition exists selected from the group consisting of a version flag being set and the most recent version determined invalid.

6-9.   (Cancelled)

10.   (New) The method of claim 2 wherein the boot images include boot images for more than one family of processor instruction set architectures.

11.   (New) The method of claim 2 wherein the computer system is a heterogeneous cellular computer system.

12.   (New) The method of claim 11 wherein the computer system further comprises a second cell comprises at least a second processor, wherein the first and the second processor are of different instruction set architectures, and further comprising:

> selecting a second compatible boot image, the second compatible boot image different from the compatible boot image; and
>
> configuring a second mapping hardware to map the second compatible boot image into memory space of the second processor.

13.   (New) A method of updating firmware on a computer system, the computer system comprising:

> at least one processor, and
>
> at least one management processor coupled to a processor type register;
>
> the method comprising:
>
> determining a discardable boot image, selected from the group consisting of a boot image incompatible with the processor and a least-recent boot image compatible with the processor;
>
> erasing the discardable boot image from an EEPROM of the computer system; and
>
> writing a new boot image to the EEPROM;

      wherein the processor is a processor on a cell of a heterogeneous cellular computer system, the cell comprises the processor coupled through mapping hardware to the EEPROM, and wherein a recent boot image compatible with the processor is retained in the EEPROM when the discardable boot image is erased from the EEPROM; and

wherein the management processor reads the processor type register at system powerup to determine an appropriate boot image for the processor and configures the mapping hardware to present said appropriate boot image to the processor.